



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,147	03/08/2005	Benoit Lecino	006379.00015	9538
22908	7590	03/07/2006	EXAMINER	
BANNER & WITCOFF, LTD. TEN SOUTH WACKER DRIVE SUITE 3000 CHICAGO, IL 60606			PECHHOLD, ALEXANDRA K	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/527,147	LECINO ET AL.	
	Examiner	Art Unit	
	Alexandra K. Pechhold	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 December 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4,6-8 and 10-14 is/are rejected.
- 7) Claim(s) 2,3,5,9,15 and 16 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 6, 10, 11, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Daiguji et al (US 4,557,007).**

Regarding claim 1, Daiguji discloses a cable comprising:

- a set of traction reinforcements (seen as tapered grips 20 on the end of each wire 19),
- two devices for anchoring the reinforcements (seen as the ends of anchor sockets 10),
- means for deviating the reinforcements to cause them to converge into a substantially parallel bundle (seen as cable cover 22),
- at least one guide member (seen as ribs 16) in closely set contact around the reinforcements in the portion of the cable where the reinforcements converge toward the running part (see Fig. 3), the guide member having an inner surface (seen as internal periphery of ribs 16) presenting a cross section adapted to a peripheral shape of the parallel bundle (see Figs. 4 and 5) and a longitudinal section having a convex curvature (see Figs. 3-

5) whereby, over the length of the guide member, inherently the convex curvature allows angular deflections of the reinforcements up to an angle substantially greater than a maximum angle of convergence of the reinforcements between the anchoring device and the running part of the cable.

Regarding claim 6, the ribs (16, 16') are inherently capable of some amount of transverse movement with respect to the anchoring devices.

Regarding claim 10, a collar as recited is seen as cable cover (22) in Fig. 3.

Regarding claim 11, inserts as recited are seen as (26) in Fig. 3.

Regarding claim 14, the ribs (16) and cable cover (22) are connected as Fig. 3 shows.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daiguji et al (US 4,557,007) as applied to claim 1 above, and further in view of Paulshus (WO 02/057560).** Daiguji fails to disclose the radius of curvature of the longitudinal section of the inner surface of the guide member being at least 3 m at a certain portion. Paulshus teaches an internal surface (17a) with a radius of curvature of

10 m as an example (page 6, lines 2-4). Paulshus states that this curvature shall provide for that the tension legs receives controlled bending against the internal surface (17a) of the embracing element (17) of the tension leg (10) is exposed to a lateral force (page 6, lines 4-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the radius of curvature in Daiguji to be at least 3 m as taught by Paulshus, since Paulshus states on page 6, lines 2-6 that this curvature shall provide for controlled bending against the internal surface when exposed to a lateral force.

5. Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Daiguji et al (US 4,557,007) as applied to claim 1 above, and further in view of Lovett et al (US 5,173,982).

Regarding claim 7, Daiguji fails to disclose means for damping transverse vibrations of the bundle of reinforcements and the recited location. Lovett teaches a damper (42) and damper (84) (see Figs. 4A, 4B) in the position as recited. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cable of Daiguji to include a damper as recited, as taught by Lovett, since a dampening means reduces the vibrations affecting the cable.

Regarding claim 8, the ribs (16) inherently have limited capacity for transverse movement.

6. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daiguji et al (US 4,557,007) as applied to claim 11 above, and further in view of Jartoux et al (US 6,301,735).

Art Unit: 3671

Regarding claim 12, Daiguji fails to disclose inserts comprising plastic sleeves placed individually around the reinforcements inside the guide member. Jartoux teaches an elastomer (8) placed individually around the reinforcements (see Fig. 2 and Col 3, lines 64-67 and Col 4, lines 1-9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cable of Daiguji to include plastic sleeves placed individually around the reinforcements inside the guide member, as taught by Jartoux, since the plastic of Jartoux will have better wear and durability characteristics than the concrete of Daiguji.

Regarding claim 13, a hexagonal cross section is seen in Daiguji in Figs. 4 and 5.

Allowable Subject Matter

7. Claims 2, 3, 5, 9, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 12/27/05 have been fully considered but they are not persuasive.

Applicant argues that Daiguji does not disclose the limitation in claim 1 of the guide member presenting a longitudinal section having a convex curvature, whereby, over the length of the guide member, the convex curvature allows angular deflections of the reinforcements up to an angle substantially greater than a maximum angle of

convergence of the reinforcements between the anchoring device and the running part of the cable. The Examiner disagrees with applicant on this point, since one can deduce from Fig. 3 of Daiguji that the outer surface of the ribs (16) comprise a convex curvature. Daiguji specifically states in column 1, lines 55-59 that anchor socket (10) comprises a cylindrical portion (11). Fig. 3 shows that the ribs (16) are part of this cylindrical portion (11) along an exterior thereof, and therefore have a cylindrical shape, which meets the claimed recitation of a convex curvature. With respect to the "whereby" clause, the applicant does not recite any particular structure that supports this assertion, and therefore it is not clear that the prior art is incapable of achieving the same. Being an apparatus claim, the applicant needs to set forth the distinguishing structural differences from the prior art that achieve this function in order for the difference between the prior art and the applicant's invention to be clear structurally.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

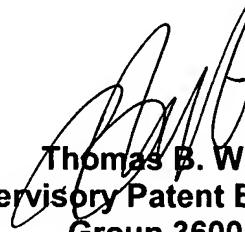
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3671

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (571) 272-6994. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (571) 272-6998. The fax phone number for this Group is (571) 273-8300.



Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
3/1/06